AMENDMENT

IN THE CLAIMS:

Please cancel claims 1-20, claims 21-30 were previously canceled and add new claims 31-56 as indicated below. The status and current version of the claims follows:

1-30. (Canceled)

31. (New) A method of reducing time for use by a first modem to reconnect to a second modem via a communication channel, said method comprising the steps of:

receiving a first digital impairment learning sequence from said second modem over said communication channel;

determining first one or more digital impairment attributes of said communication channel based on analyzing said first digital impairment learning sequence;

interrupting said communication channel;

terminating said interrupting;

receiving an signal point sequence from said second modem;

determining second one or more digital impairment attributes of said communication channel based on analyzing said signal point sequence; and

initializing said first modem with said one or more parameters to reconnect to said second modem if said first one or more digital impairment attributes are similar to corresponding said second one or more digital impairment attributes.

32. (New) The method according to claim 31, wherein said signal point sequence is a modified answer tone.

33. (New) The method according to claim 31, wherein said modified answer tone is an ANSpcm signal.

34. (New) The method according to claim 31, further comprising:

obtaining one or more parameters for initializing said first modem for connection over said communication channel;

storing said one or more parameters at said first modem;

wherein said terminating said interrupting comprises transmitting a reconnect indication after said interrupting and wherein said signal point sequence is received from said second modem in response to said reconnect indication.

35. (New) The method according to claim 31, further comprising storing said first one or more digital impairment attributes of said communication channel at said first modem.

36. (New) The method according to claim 31, wherein said interrupting disconnects said first modem from said second modem.

37. (New) The method according to claim 36, wherein said terminating includes dialing a phone number associated with said second modem.

38. (New) The method according to claim 31, wherein said interrupting places communication between said first modem and second modem on hold.

39. (New) The method according to claim 38, wherein said terminating is performed without dialing a phone number associated with said second modem.

40. (New) The method according to claim 31, wherein said first one or more digital impairment attributes include first points/levels, and second one or more digital impairment attributes include second points/levels, wherein similarity is determined by comparing said first points/levels with said second points/levels.

41. (New) The method according to claim 31, wherein said one or more of parameters comprise data associated with a signal point constellation for said first modem.

42. (New) The method according to claim 31, wherein said one or more of parameters comprise data associated with echo canceler settings for said first modem.

43. (New) The method according to claim 31, wherein said one or more of parameters comprise data associated with power level settings for said first modem.

44. (New) The method according to claim 31, wherein said one or more of parameters comprise data associated with equalizer settings for said first modem.

45. (New) The method according to claim 31, further comprising a step of receiving a reply signal prior to said receiving said ANSpcm signal, wherein said reply signal comprising a transition sequence configured to enable said first modem to determined robbed bit signaling characteristics of said communication channel.

46. (New) A computer readable medium including computer software program executable by a processor in a first modem for implementing a method of reducing time for use by the first modem to reconnect with a second modem over a communication channel, said computer software program comprising:

code for receiving a first digital impairment learning sequence from said second modem over said communication channel;

code for determining first one or more digital impairment attributes of said communication channel based on analyzing said first digital impairment learning sequence;

code for interrupting said communication channel;

code for terminating said interrupting;

code for receiving an signal point sequence from said second modem;

code for determining second one or more digital impairment attributes of said communication channel based on analyzing said signal point sequence; and

code for initializing said first modem with said one or more parameters to reconnect to said second modem if said first one or more digital impairment attributes are similar to corresponding said second one or more digital impairment attributes.

47. (New) The computer software program of claim 46, wherein said signal point sequence is a modified answer tone.

48. (New) The computer software program of claim 46, wherein said modified answer tone is an ANSpcm signal.

49. (New) The computer software program of claim 46, further comprising:

code for obtaining one or more parameters for initializing said first modem for connection over said communication channel;

code for storing said one or more parameters at said first modem;

wherein said code for terminating said interrupting comprises code for transmitting a reconnect indication after said interrupting and wherein said signal point sequence is received from said second modem in response to said reconnect indication.

50. (New) The computer software program of claim 46, further comprising code for storing said first one or more digital impairment attributes of said communication channel at said first modem.

51. (New) The computer software program of claim 46, wherein said code for interrupting disconnects said first modem from said second modem.

52. (New) The computer software program of claim 51, wherein said code for terminating includes dialing a phone number associated with said second modem.

53. (New) The computer software program of claim 46, wherein said code for interrupting places communication between said first modem and said second modem on hold.

54. (New) The computer software program of claim 53, wherein said code for terminating is performed without dialing a phone number associated with said second modem.

55. (New) The computer software program of claim 46, wherein said one or more parameters include a receiver parameter.

56. (New) The computer software program of claim 46, wherein said one or more stored parameters include a parameter associated with said communication channel.